

GAS METHANE BATUBARA DI FORMASI WAHAU BERDASARKAN DATA PROKSIMAT DAN MASERAL, KABUPATEN KUTAI TIMUR , KALIMANTAN TIMUR

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ABSTRACT

A geological research was performed in the Kutai Basin, to provide a better understanding on the potential and resources of coalbed methane (CBM) in Berau Regency, East Kalimantan Province, particularly in the Wahau Coalfield. Field observation conducted in the coalfield, shows that the dull banded . Geochemical analysis shows the range of volatile matter content is from 37,40 – 49,38 %, moisture from 12,89 – 40,87 %, ash varies between 4,71 – 15,43 %, and fixed carbon from 14,44 – 39,54 %. Based on average of vitrinite reflectance 0,44 . Coal rank is from sub-bituminous C . The Methane gas is resulted coming from biogenic process. The fairly sincline structure coal Wahau show orientations trending North East – South West. An in-situ coal gas calculation tends to indicate a low to moderate methane content level, with a value of 4,7 – 3,6 m³/t. Coal gas methane resources is 1,12 TCF.

Key Words : Vitrinite reflectance, Coalbed methane, proximate

SARI

Penelitian geologi yang dilaksanakan di sub cekungan Kutai terhadap lapangan batubara Wahau, Kabupaten Berau, Propinsi Kalimantan Timur, adalah untuk mengetahui potensi sumber daya "coalbed methane" di daerah tersebut. Pengamatan lapangan yang dilakukan di lapangan batubara menunjukkan bahwa litotipe batubara yang teramati adalah "dull banded". Sementara itu, dari analisis geokimia terlihat kisaran kandungan zat terbang antara 37,40 – 49,38 %, kadar air 12,89 – 40,87%, abu 4,71 – 15,43 %, dan kandungan karbon 14,44 – 39,54 %. Berdasarkan rata – rata nilai reлектan vitrinite 0,44.. Peringkat batubara Wahau masuk subbituminous C. Gas metana yang dihasilkan berasal dari proses biogenik. Kehadiran struktur sinklin dalam batubara Wahau berarah umum Timur Laut - Barat Daya. . Kandungan gas batubara secara perhitungan "insitu" menunjukkan nilai 4,7 – 3,6 m³/t. Besarnya sumberdaya gas methane adalah 1,12 TCF.

Kata Kunci : Reflektan Vitrinite, , Coalbed methane, proximate